

Application No. 10/705,591
Response dated: March 21, 2007
In Reply to Non-Final Office action dated November 21, 2006

REMARKS

In response to the Office action dated November 21, 2006 Applicants respectfully request reconsideration based on the above claim amendments and the following remarks. Applicants respectfully submit that the Claims as presented are in condition for allowance.

Claims 1-20 are pending in the present Application. Claims 1, 7-9, 11 and 13 have been amended, Claims 6 and 10 are cancelled without prejudice and Claim 21 has been added, leaving Claims 1-5, 7-9 and 11-21 for consideration upon entry of the present amendment and following remarks.

Support for the claim amendments is found in the specification, the figures and the claims as originally filed. No new matter has been introduced by these amendments. Support for amended Claim 1 is found on page 8, line 23 to page 9, line 7 of the Specification as originally filed, Figures 2 and 4, and cancelled Claim 6. Support for amended Claim 9 is at least found on page 9, lines 24 and 25 of the Specification as originally filed, Figures 3 and 4, originally filed Claim 1, cancelled Claim 10. Claims 7, 8, 11 and 13 have been amended to provide proper dependency based on the cancellation of Claims 6 and 10.

Claim 21 has been added better set forth the invention. Support for added Claim 21 is found in Figure 2 as originally filed.

No new matter has been introduced by these amendments. Reconsideration and allowance of the claims are respectfully requested in view of the above amendments and the following remarks.

Claim Rejections Under 35 U.S.C. §102

“A claim is anticipated only if *each and every element* as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. V. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987.)

Amended Claim 1 recites, *inter alia*:

“a plurality of deformation prevention parts suitable to prevent the base film from being deformed, the deformation prevention parts disposed on a second surface of the base film opposite to the first surface and spaced apart from each other”

Application No. 10/705,591
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Claims 1 and 5 stand rejected under 35 U.S.C. §102(b) as being anticipated by Lemelson, U.S. Patent No. 2,951,419, (hereinafter “Lemelson”.) Applicants respectfully traverse the rejections.

In the Office action, transparent panel/sheet 20, projections 24 and reflective coating 28 of Lemelson are considered as disclosing the base film, protrusion and reflecting layer, respectively, of the claimed invention.

As discussed above, projections 24 of Lemelson are considered as the “protrusion” of the claimed invention. Lemelson does not disclose a plurality of deformation prevention parts suitable to prevent the base film from being deformed, the deformation prevention parts disposed on a second surface of the base film opposite to the first surface and spaced apart from each other of amended Claim 1.

Thus, Lemelson fails to disclose all of the limitations of amended Claim 1 and does not anticipate amended Claim 1. Claim 5 depends from Claim 1, is correspondingly not anticipated by Lemelson, is not further rejected or objected and is therefore allowable. Reconsideration and withdrawal of the relevant §102 rejections of Claims 1 and 5, and allowance of Claim 5 are respectfully requested.

In addition, Claim 1 stands rejected under 35 U.S.C. §102(e) as being anticipated by Kawaguri et al., U.S. Patent Application Publication No. 2004/0021810 A1, (hereinafter “Kawaguri”.) Applicants respectfully traverse the rejection.

Regarding Claim 6 in the Office action at Page 6, it is conceded that Kawaguri does not teach the “reflector including a deformation prevention part for preventing the base film from being deformed.” However, it is alleged at Page 6 of the Office action that Yang et al., U.S. Patent No. 6,151,089 (hereinafter “Yang”) teaches a reflector [Fig. 2: (8)] including a base film [Fig. 2: (15)], whereby a plurality of deformation prevention parts [Fig. 2: (12)] in the form of a dotted pattern is provided/embossed on a second surface of the base film opposite to a first surface so as to prevent the film from being deformed. (Col. 6, lines 13-30)”

In the Office action, resin layer 15, transparent flattening layer 12 and reflecting layer 8 of Yang are considered as disclosing base film, deformation prevention part and reflecting layer, respectively, of the claimed invention.

In Yang, the reflecting layer 8 includes a resin layer 15 have a corrugation and a metal film 16 formed on the surface of the resin layer 15. (Col. 6, lines 21-23 and Figure 2.) The transparent flattening layer 12 is provided between the reflecting layer 8 (15 and 16) and an alignment layer 17. (*Id.*)

The reflecting layer 8 of Yang does not disclose the “reflecting layer” of the claimed invention. As cited above, the reflecting layer 8 *includes* the resin layer 15. Claim 1 recites, “**a base film and a reflecting layer deposited on the first surface of the base film.**” Since the reflecting layer 8 of Yang includes the resin layer 15, the resin layer 15 cannot be deposited on itself as teaching the “base film.” Therefore, Yang does not disclose a base film and a plurality of deformation prevention parts suitable to prevent the base film from being deformed, the deformation prevention parts disposed on a second surface of the base film opposite to the first surface and spaced apart from each other of amended Claim 1.

Furthermore, even if the metal film 16 of the reflecting layer 8 of Yang is considered as the “reflecting layer” of the claimed invention, relative to the resin layer 15 (considered as the “base film” of the claimed invention), the metal layer 16 and the flattening layer 12 are on the *same* surface of the resin layer 15. That is, the flattening layer 12 is *not* provided on a second surface of the resin layer 15 opposite to a first surface of the resin layer 15 on which the metal layer 8 is provided. Therefore, Yang further does not disclose a base film and a plurality of deformation prevention parts suitable to prevent the base film from being deformed, the deformation prevention parts disposed on a second surface of the base film opposite to the first surface and spaced apart from each other of amended Claim 1.

Moreover, the flattening layer 12 of Yang considered as disclosing the “deformation prevention parts” of the claimed invention, are not *spaced apart from each other* as claimed. Therefore, Yang further does not disclose a base film and a plurality of deformation prevention parts suitable to prevent the base film from being deformed, the deformation prevention parts disposed on a second surface of the base film opposite to the first surface and spaced apart from each other of amended Claim 1. To the contrary, the flattening layer 12 teaches away from the claimed invention and has no space between the protrusions.

Thus, Kawaguri and Yang fail to disclose all of the limitations of amended Claim 1 and do not anticipate amended Claim 1. Applicants respectfully submit that Claim 1 is not further

Application No. 10/705,591
Response dated: March 21, 2007
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rejected or objected and is therefore allowable. Reconsideration, withdrawal of the relevant §102 rejections and allowance of Claim 1 is respectfully requested.

Claim Rejections Under 35 U.S.C. §103

For an obviousness rejection to be proper, the Examiner must meet the burden of establishing that all elements of the invention are disclosed in the prior art and that the prior art relied upon, coupled with knowledge generally available in the art at the time of the invention, must contain some suggestion or incentive that would have motivated the skilled artisan to modify a reference or combined references. *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988); *In Re Wilson*, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970); *Amgen v. Chugai Pharmaceuticals Co.*, 927 U.S.P.Q.2d, 1016, 1023 (Fed. Cir. 1996.)

Claims 2-4 and 6-8

Claims 2 and 3 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Lemelson.

Claim 4 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Lemelson further in view of Sinkoff, U.S. Patent No. 6,724,529, (hereinafter “Sinkoff”.)

Claims 6-8 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Kawaguri further in view of Yang. Applicants traverse the rejections. Claim 6 is hereinabove cancelled without prejudice and its limitations are now included in amended Claim 1.

Claims 2-4 and 7-8 variously depend from Claim 1, and inherit all of the limitations of amended Claim 1. As discussed above, Lemelson, Kawaguri and Yang do not teach or suggest all of the limitations of amended Claim 1 as including the limitations of cancelled Claim 6 for all the reasons discussed above.

Sinkoff is relied upon as teaching a protrusion being embossed on the base film. Sinkoff does not teach or suggest a base film and a deformation prevention part suitable to prevent the base film from being deformed, the deformation prevention part disposed on a second surface of the base film opposite to the first surface of amended Claim 1, and does not remedy the deficiencies of Lemelson, Kawaguri and Yang with respect to amended Claim 1.

Claims 9-20

Claim 9 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Kawaguri further in view of Kaminsky et al., U.S. Patent No. 6,898,012 B2, (hereinafter "Kaminsky".)

Claims 10-14 and 16-20 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Kawaguri in view of Kaminsky and in further view Hira et al., U.S. Patent No. 5,961,198, (hereinafter "Hira".)

Claim 15 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Kawaguri in view of Kaminsky and in further view of Yang. Applicants respectfully traverse the rejections.

Amended Claim 9 as including the limitations of cancelled Claim 10 recites, *inter alia*, "a reflector comprising:

a base film;

a protrusion provided on a first surface of the base film, the first surface being substantially flat; and

a reflecting layer deposited on the first surface of the base film where no protrusion is formed and on the protrusion, for reflecting light generated from a lamp;

wherein the protrusion partly covers the first surface of the base film and the reflecting layer contacts with the first surface of the base film

a light guide plate disposed on the reflector; and

a plurality of prism teeth formed on a surface of the light guide plate facing the reflector."

In the Office action, it is alleged that Kawaguri discloses the claimed invention of Claim 1, now included in amended Claim 9. Regarding Claim 9 in the Office action, Kawaguri is conceded as not disclosing the specifics of an LCD device including a backlight assembly having the reflector identified in now amended Claim 9. However, Kaminsky is relied upon as teaching the light guide plate of the claimed invention. Particularly, light guide 2 of Kaminsky is considered as teaching the "light guide plate" of Claim 9. Regarding cancelled Claim 10, Hira is relied upon as teaching prism teeth being formed on a surface of a light guide plate facing a reflector.

Applicants submit that there is no motivation to modify or combine Kawaguri, Kaminsky and Hira to teach the claimed invention, including a reflector comprising a base film, a protrusion provided on a first surface of the base film, a reflecting layer deposited on the first surface of the base film where no protrusion is formed and on the protrusion, wherein the protrusion partly covers the first surface of the base film and the reflecting layer contacts with

Application No. 10/705,591
Response dated: March 21, 2007
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the first surface of the base film, a light guide plate disposed on the reflector and a plurality of prism teeth formed on a surface of the light guide plate facing the reflector of amended Claim 9.

In a non-limiting embodiment of the claimed invention at page 11, line 19 to page 12, line 1 of the Specification, the protrusions provided on a front surface of the base film facing the prism parts formed on a rear of the light guide prevent damage to the prism parts and the reflecting layer.

Kaminsky discloses reflector 4 to direct light energy into the light guide 2. (Figure 2 and Col. 18, lines 8-10.) Kawaguri and Kaminsky does not teach or suggest anything resembling “prism teeth” on a surface of the light guide 2 facing the reflector 4. Kawaguri also teach or suggest nothing relating to protecting the prism teeth or the reflector by its “protrusions” of the claimed invention. Hira discloses a planar reflecting sheet 8 and does not teach or suggest anything resembling “protrusion,” especially to protect or prevent damage to the planar reflecting sheet. Therefore, there exists *no motivation to modify and combine* Kawaguri, Kaminsky and Hira to include protrusions partly covering the first surface of the base film, a reflecting layer contacting with the first surface of the base film, and a light guide plate disposed on the reflector and a plurality of prism teeth formed on a surface of the light guide plate facing the reflector so as to protect the reflecting layer and the prism teeth of the claimed invention.

Claims 11-20 variously depend from Claim 9, and inherit all of the limitations of amended Claim 9. As discussed above, Kawaguri, Kaminsky, Yang and Hira do not teach or suggest all of the limitations of amended Claims 11-20 and there exists no motivation to modify or combine the references to teach the limitations of Claims 11-20.

Additionally, Applicants respectfully submit that there exists *no motivation to modify or combine* Kawaguri and Yang to teach the claimed invention.

It is alleged on Page 6 of the Office action that it would have been obvious to one ordinarily skilled in the art at the time of the was made to modify the reflector of Kawaguri to incorporate the deformation prevention parts of Yang in order to provide further protection to the shape of the reflecting film, as well as the base film from deforming. Applicants respectfully disagree.

Kawaguri relates to reflective plates on which a multiplicity of protrusions 112 are provided on a substrate 111, and a reflective film 113 is provided to cover the protrusions 112.

(Paragraph [0022].) However, Kawaguri is directed to protrusions which are formed by developing a photosensitive resin layer through a mask having a pattern. (Paragraph [0066].) Although this process of forming the protrusions may cause the protrusions to shrink slightly, the formations of the protrusions would not deform the substrate 111, and therefore, deformation relative to the substrate 111 would not be an issue in Kawaguri.

Even if deformation were a consideration in Kawaguri, no elements or features of any kind are disclosed “on a second surface” of the substrate 111 “opposite to the first surface” of the substrate 111. Therefore, Applicants find no suggestion or motivation in Kawaguri or to one of ordinary skill in the art to dispose a deformation prevention part suitable to prevent the substrate 111 from being deformed, the deformation prevention part disposed on a second surface of the substrate 111 opposite to a first surface of the substrate 111.

Furthermore, as discussed above Yang discloses a reflection type display device.

(Abstract.) The flattening layer 12 of Yang is *not* provided on a second surface of the resin layer 15 opposite to a first surface of the resin layer 15 on which the metal layer 16 is provided. In fact, Yang teaches away from disposing the flattening layer 12 on an opposite side of the resin layer 15 from the metal layer 16. The profiles of the flattening layer 12 and metal layer 16 are instead *facing each other on the same side of the resin layer 15*. Therefore, Applicants find no suggestion or motivation in Yang or to one of ordinary skill in the art to dispose the flattening layer 12 (as the deformation part) of Yang on the substrate 111 of Kaminsky suitable to prevent the substrate 111 from being deformed, the deformation prevention part disposed on a second surface of the substrate 111 opposite to a first surface of the substrate 111.

Thus, since Lemelson, Kawaguri, Yang, Sinkoff, Kaminsky and Hira *fail to teach or suggest all of the limitations* of Claims 2-4, 7-9 and 11-20 and that there exists *no motivation to modify or combine the relevant teachings of the references* to disclose the claimed invention, clearly, one of ordinary skill at the time of Applicants’ invention would not have a *motivation to modify or combine the references, nor a reasonable likelihood of success in forming the claimed invention* by modifying or combining the references.

Thus, *prima facie* obviousness does not exist regarding Claims 2-4, 7-9 and 11-20 with respect to Lemelson, Kawaguri, Yang, Sinkoff, Kaminsky and Hira. Applicants respectfully submit that Claims 2-4, 7-9 and 11-20 are not further rejected or objected and are therefore

Application No. 10/705,591
Response dated: March 21, 2007
In Reply to Non-Final Office action dated November 21, 2006

allowable. Reconsideration, withdrawal of the relevant §103 rejections and allowance of Claims 2-4, 7-9 and 11-20 are respectfully requested.

Conclusion

All of the rejections are herein overcome. In view of the foregoing, it is respectfully submitted that the instant application is in condition for allowance. No new matter is added by way of the present Amendments and Remarks, as support is found throughout the original filed specification, claims and drawings. Prompt issuance of Notice of Allowance is respectfully requested.

The Examiner is invited to contact Applicants' attorney at the below listed phone number regarding this response or otherwise concerning the present application.

Applicants hereby petition for any necessary extension of time required under 37 C.F.R. 1.136(a) or 1.136(b) which may be required for entry and consideration of the present Reply.

If there are any charges due with respect to this Amendment or otherwise, please charge them to Deposit Account No. 06-1130 maintained by Applicants' attorneys.

Respectfully submitted,

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